CLAIMS

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- (Original) A material consisting essentially of:
 silica; and
 nucleic acids covalently bonded to the silica.
- 2. (Original) The material of claim 1, wherein the nucleic acids are DNA.
- 3. (Original) The material of claim 1, wherein the material is a flat surface.
- 4. (Original) The material of claim 1, wherein the material is a bead.
- 5. (Original) The material of claim 1, wherein the material is an array of fibers.
- 6. (Original) The material of claim 1, wherein the silica is at least about 80% pure silicon dioxide.
- 7. (Original) The material of claim 1, wherein the silica is at least about 90% pure silicon dioxide.
- 8. (Original) The material of claim 1, wherein the silica is at least about 95% pure silicon dioxide.
- 9. (Original) The material of claim 1, wherein the silica is pure silicon dioxide.
- 10. (Original) A material consisting of:silica; andnucleic acids covalently bonded to the silica.

- 11. (Original) The material of claim 10, wherein the nucleic acids are DNA.
- 12. (Original) The material of claim 10, wherein the material is a flat surface.
- 13. (Original) The material of claim 10, wherein the material is a bead.
- 14. (Original) The material of claim 10, wherein the material is an array of fibers.
- 15. (Original) The material of claim 10, wherein the silica is at least about 80% pure silicon dioxide.
- 16. (Original) The material of claim 10, wherein the silica is at least about 90% pure silicon dioxide.
- 17. (Original) The material of claim 10, wherein the silica is at least about 95% pure silicon dioxide.
- 18. (Original) The material of claim 10, wherein the silica is pure silicon dioxide.
- 19. (Previously Presented) A method for binding nucleic acids to a surface, the method comprising:

providing a mixture comprising nucleic acids and a charged material comprising a xanthine compound; and

contacting the mixture and a surface to produce a bound material, wherein the bound material comprises nucleic acids covalently bonded to the surface.

- 20-25. (Cancelled).
- 26. (Original) The method of claim 19, wherein the surface consists essentially of silica.
- 27. (Original) The method of claim 19, wherein the surface consists of silica.

28. (Original) The method of claim 19, further comprising removing the charged material after the contacting step.